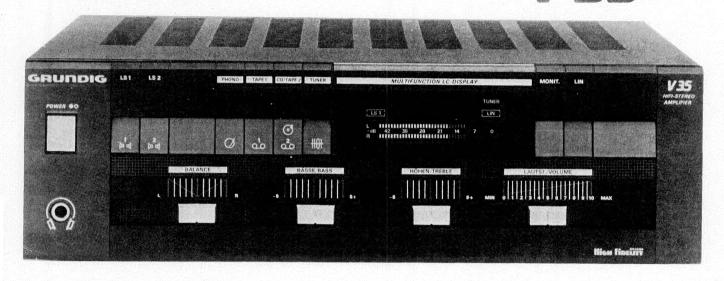
# GFRUMDIG HIFI-STEREO AMPLIFIER V35



### **Technical Specification**

Output Power (DIN 45500) Only LS 1 or LS 2 into 4 Q: Music Power/Nominal Power Only LS 1 or LS 2 into 8 Q: Music Power/Nominal Power LS 1 + LS 2 into 8 Ω: Music Power/Nominal Power Total Harmonic Distortion (at nominal power - 1 dB) Intermodulation Distortion (at nominal power - 1 dB) Damping Factor (4  $\Omega$ ) R<sub>i</sub> = 160 m $\Omega$ Frequency Response Phono (magn.): Tuner, Tape, CD, Monitor: Stereo Separation(for 1 kHz) Tuner, Tape, CD, Monitor: Signal-to-Noise Ratio (Unweighted) (rms/peak value to DIN 45 405): a) at nominal power Phono: Tuner, Tape, CD, Monitor: b) for 2 x 50 mW into 4  $\Omega$ Input Sensitivity (at nominal power) Tuner, Tape, CD, Monitor: Maximum Input Voltage (Input overload point) Phono: Tuner, Tape, CD, Monitor:

Subject to technical alterations

# Your Amplifier at a Glance

- ① On/Off Button (POWER)
- ② Switches for Loudspeaker Groups 1 and 2
- **(3) Sound Source Selection Buttons**

PHONO = sound reproduction from records (input sockets PHONO)

TAPE 1 = playback from cassette/tape recorder

(TAPE 1 sockets) CD/TAPE 2 = playback from cassette/tape recorder or re-

production from compact disc player

(CD/TAPE 2 sockets)

**TUNER** = reproduction of radio broadcast

(4) Illuminated Display

For indicating the sound source selected and the signal output level.

(5) MONIT. Button

For switching on the MONITOR input, eg: for tape monitor operation (off-tape monitoring).

- (6) LIN. Button (press in for linear frequency response)
- (7) Volume Control
- **8 Tone Controls** For adjusting bass and treble.
- Stereo BALANCE Control
- (II) Stereo Headphone Socket (6.3 mm jack plug; 5-2000 ohm)
- 11) Terminals for the loudspeaker groups. L = Left-hand channel; R = Right-hand channel.

Top = Group 1 Bottom = Group 2 (2) Connection Sockets for sound sources and tape units.

All sockets are phono sockets.

L = Left-hand channel; R = Right-hand channel.

From left to right:

**TUNER** Tuner input.

TAPE 1 = Input for playing back from a cassette/tape

recorder.

LINE/REC. 1 = Output for recording onto a cassette/tape re-

corder.

LINE/REC. 2 = Output for recording onto a second cassette/

tape recorder.

CD/TAPE 2 = Input for playing back from a compact disc

player (CD) or from a second cassette/tape

recorder.

MONITOR = Input for off-tape monitoring or as spare for a

second CD player or another cassette/tape

**PHONO** = Input for a record deck with magnetic car-

tridae.

(3) Earthing Terminal for Record Deck

# **Positioning**

If the unit is operated in a closed wall unit or hifi rack, etc. adequate ventilation must be provided (do not cover the ventilation slots in the top of the unit).

Units placed on top of each other should be arranged as shown in the figure on page 3.

Do not run mains and loudspeaker cables near audio leads such as those from the record deck or cassette deck.

### Care of Unit

Only clean the cabinet with a soft duster which picks up dust. Polishing and cleaning agents may damage the surface of the cabinet.



# **Mains Connection**

Only connect the amplifier to a 50/60 Hz mains supply. The mains voltage required is shown on the back of the amplifier.

# Additional Information for Units Sold in Great Britain

We recommend that a 13 amp 3-pin plug fitted with a 3-5 amp fuse be used. The brown lead must be connected to the live pin (marked "L" or "brown" or "red") and the blue lead to the neutral pin (marked "N" or "blue" or "black"). On no account should either of the wires be connected to the earth pin (marked "E" or "green/yellow"). If other mains plugs are used, ensure that they are protected with a 3-5 amp fuse.

# **Sound Signal Connections**

Take care to connect all the plugs to the correct channel sockets (L = left-hand channel; R = right-hand channel).

### Loudspeaker Connection

To exploit the performance of the amplifier to the full, high-quality hifi loudspeaker enclosures with adequate power-handling capacity are necessary (see power output under "Specification").

- You may connect two loudspeaker groups.
- Both groups (LS 1 and LS 2) may be switched on separately or simultaneously.
- If only one loudspeaker group is operated, the nominal impedance of the loudspeakers per channel may be 4 – 16 ohm. The optimum loudspeaker impedance is 4 ohm. The output power decreases as the impedance increases.
- If two loudspeaker groups are operated simultaneously, the nominal impedance of the loudspeakers per channel must only be 8 – 16 ohm.

To connect the leads, press the terminal button, insert the Litz wire and release the button.

The following two points should be observed when connecting the loudspeakers:

- The loudspeaker to the right of the listener should be connected to the terminals marked R (r. h. channel), appropriate to the loudspeaker group (group 1 or group 2). The same applies to the l. h. channel (terminals "L").
- Ensure that all the leads are connected the right way round (observe identifying marks of leads, eg: different colour, coloured lines, coloured tracer threads, identification ribs).
   Connect all leads with the same identifying marks to the red terminals, all other leads to the black terminals.

### **Tuner Sockets**

Your tuner should be connected to the input sockets marked TUNER. If your tuner has a DIN output socket, you will need a DIN/phono adapter cable which can be obtained from your dealer. Tuners from the GRUNDIG hifi range are recommended.

Tuners of other makes can of course also be used, but care should always be taken to ensure that the signal voltage corresponds to the input sensitivity of the amplifier (200 mV). The maximum permissible input voltage is 10 V. The hifi tuner used should meet DIN 45500/2.

### **Record Deck Sockets**

The input sockets marked PHONO are intended for record decks with magnetic cartridges.

If the record deck is provided with a separate earth lead, you should connect it to the earthing screw <sup>(3)</sup>.

The amplifier incorporates a phono equaliser so that a separate equaliser is not necessary. The PHONO sockets are also suitable for connecting a record deck with moving coil cartridge. This only applies, however, to record decks with a built-in pre-amplifier or transformer or one of the newer cartridges which supply higher output voltages. Record decks with crystal or ceramic cartridges or those with magnetic cartridges and an internal equaliser pre-amplifier should be connected to the sockets marked TAPE 1 or C D/TAPE 2.

### Compact Disc Player Sockets

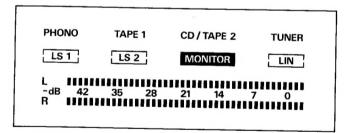
Connect your compact disc player to the input sockets marked CD/TAPE 2.

### Connecting Cassette/Tape Recorders

For record and playback you will need separate connections.

- To record, connect the output sockets marked LINE/REC 1 or LINE/REC 2 to the input sockets of the recording recorder (eg: LINE IN).
- To play back, connect the input sockets marked TAPE 1 or CD/ TAPE 2 to the output sockets of the cassette/tape recorder (eg: LINE OUT).

If you have a cassette/tape recorder which is designed for **off-tape monitoring (monitor B)**, you may also use the input sockets marked MONITOR for playback.



# **Operation**

- The amplifier is switched on and off with the POWER button ①.
   The indicator lamp above the button indicates whether the unit is on.
- The loudspeaker groups 1 and 2, if connected, can be switched on or off independently of each other using the buttons ②. The display ④ shows which loudspeaker group(s) has been connected.

- Select the input of the required sound source with the corresponding button ③. The corresponding indication will appear in the display. N. B. With this input selection, the MONIT. button ⑤ must be released.
- The volume, tone and stereo balance can be varied with the controls ①, ⑥ and ⑨.
- The contouring circuit in the set automatically matches the sound impression to the sensitivity of the ear as a function of the loudness. At medium and low volumes bass and treble are boosted so as to give a balanced overall sound impression. This "contouring" can be switched off by pressing the LIN button (§); "LIN" lights up in the display. The response will then be "linear" (ie: particular frequencies will no longer be emphasised) and this may be advantageous if large-volume loudspeaker enclosures with powerful bass response are used, especially for speech reproduction. In general, however, it is advisable not to press the LIN button (§).

For monitoring the level of the signal fed to the loudspeakers separate light-strip output meters are provided in the lower part of the display for the left- and right-hand channels. These have a rapid response to increases in level but a relatively slow return

Press the MONIT. button (§) if you wish to use the input marked MONITOR, for example, for off-tape monitoring (monitor B) with a cassette or tape recorder designed for this mode of operation. The word MONITOR will appear in the display. Switching the monitor system on and off with the MONIT. button while a recording is being made allows a direct comparison to be made between the original source and the recording without interrupting the recording.

The unit meets the VDE 0860 safety regulations and consequently also the international safety specifictions IEC 65 or CEE 1.

☐ The accessories available for your set are indicated in the GRUNDIG catalogue which can be obtained from your dealer.

Subject to alteration - E. and O.E.

